United States Department of Agriculture

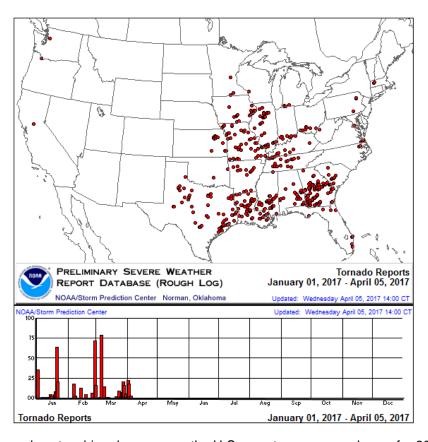
Water and Climate Update

April 6, 2017

The Natural Resources Conservation Service produces this weekly report using data and products from the <u>National Water and Climate Center</u> and other agencies. The report focuses on seasonal snowpack, precipitation, temperature, and drought conditions in the U.S.

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2017 tornado count at near record pace



The number of tornadoes touching down across the U.S. are at a near record pace for 2017. The NWS records starting in 2005 report the number of tornadoes are the second highest as of April 5. 486 tornadoes have touched down thus far, with 46 occurring in just the first five days of April. Severe storms have been sweeping across the country with tornadoes reported from the Gulf Coast and southern Florida to the northern states. The severe storms have also produced damaging winds and hail. Rare tornadoes have also been reported in the far West.

More News:

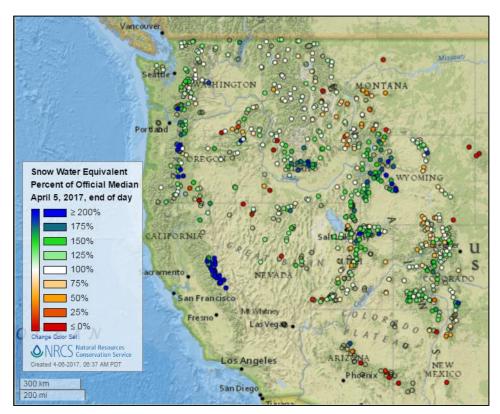
Georgia leads country in number of tornadoes for 2017

Tornadoes striking at record pace in US so far this year

Tornadoes, Damages Reported as Severe Weather Outbreak Batters the Southeast
US Tornado Count Doubles, Heads Toward Record

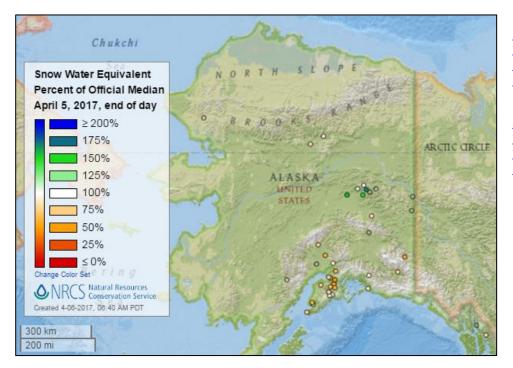
Snow

Current Snow Water Equivalent, NRCS SNOTEL Network



Snow water equivalent percent of median map

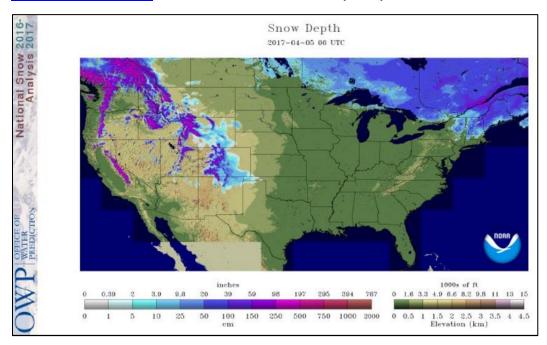
See also: Snow water equivalent values (inches) map



Alaska snow water equivalent percent of median map

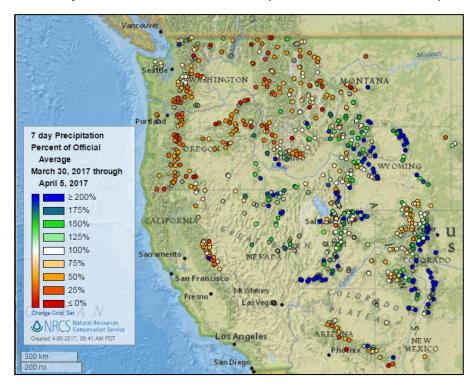
See also: Alaska snow water equivalent values (inches) map

Current Snow Depth, National Weather Service (NWS) Networks



Precipitation

Last 7 Days, Western Mountain Sites (NRCS SNOTEL Network)



7-day precipitation percent of average map

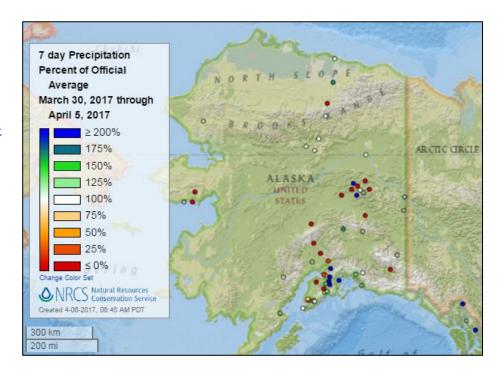
See also:

7-day total precipitation values (inches) map

Water and Climate Update

Alaska 7-day precipitation percent of average map

See also: Alaska 7day total precipitation values (inches) map



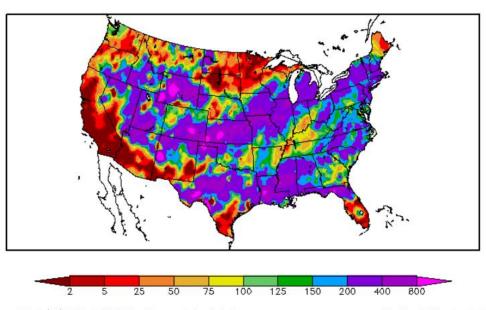
Last 7 Days, National Weather Service (NWS) Networks

7-day precipitation percent of normal map for the continental U.S.

See also: 7-day total precipitation values (inches) map

Percent of Normal Precipitation (%) 3/30/2017 - 4/5/2017

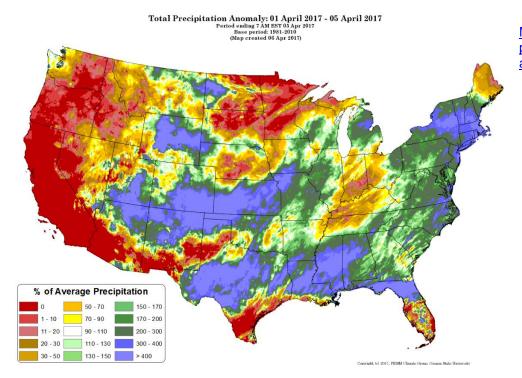
Source: Regional Climate Centers



Generated 4/6/2017 at HPRCC using provisional data.

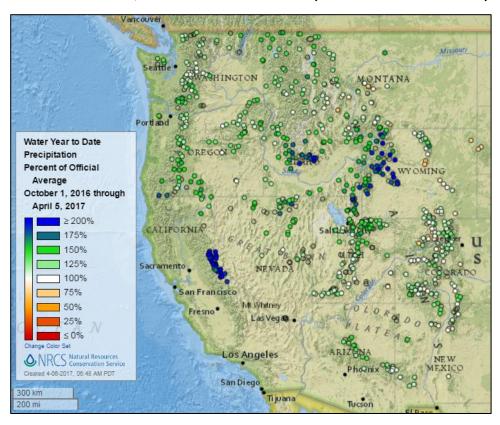
Regional Climate Centers

Month-to-Date, All Available Data Including SNOTEL and NWS Networks Source: PRISM



Month-to-date national precipitation percent of average map

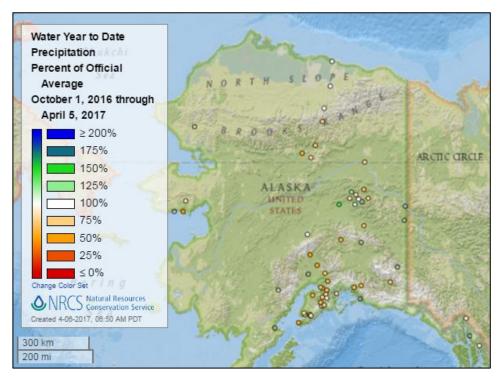
Water Year-to-Date, Western Mountain Sites (NRCS SNOTEL Network)



2017 water yearto-date precipitation percent of average map

See also: 2017 water year-todate precipitation values (inches)

Water and Climate Update



Alaska 2017
water year-to-date
precipitation percent of
average map

See also: Alaska 2017 water year-to-date precipitation values (inches) map

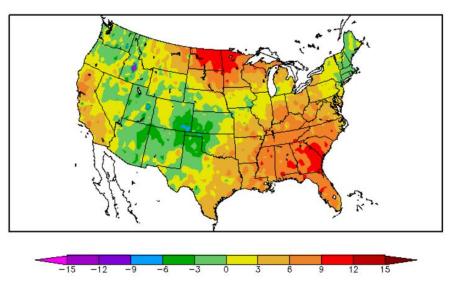
Source: Regional Climate Centers

Temperature

Last 7 Days, National Weather Service (NWS) Networks

7-day temperature anomaly map for the continental U.S.

See also: 7-day temperature (° F) map Departure from Normal Temperature (F) 3/30/2017 - 4/5/2017



Generated 4/6/2017 at HPRCC using provisional data.

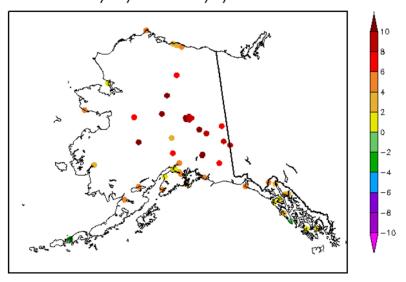
Regional Climate Center

Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

<u>7-day temperature</u> <u>anomaly map</u> for Alaska.

See also: 7-day temperature (° F) map Departure from Normal Temperature (F) 3/30/2017 - 4/5/2017

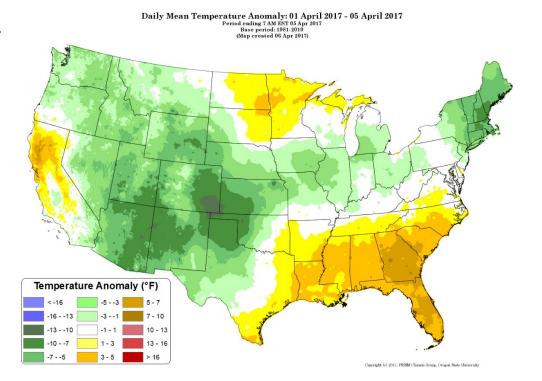


Generated 4/6/2017 at HPRCC using provisional data.

Regional Climate Centers

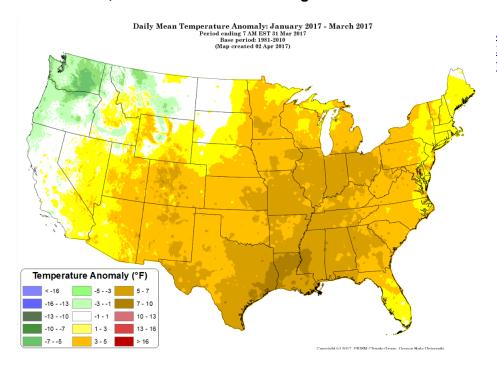
Month-to-Date, All Available Data Including SNOTEL and NWS Networks Source: PRISM

Month-to-date national daily mean temperature anomaly map



Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

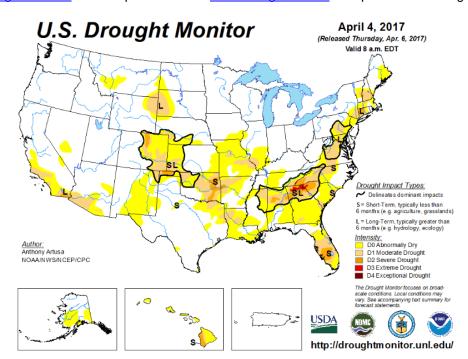


January through March 2017 daily mean temperature anomaly map

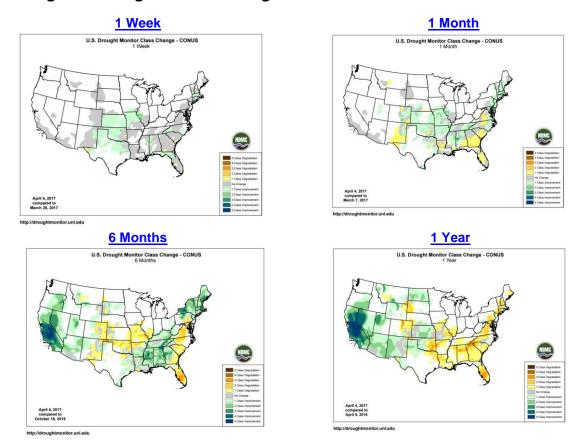
Drought

U.S. Drought Monitor See map below.

U.S. Drought Portal Comprehensive drought resource.



Changes in Drought Monitor Categories over Time



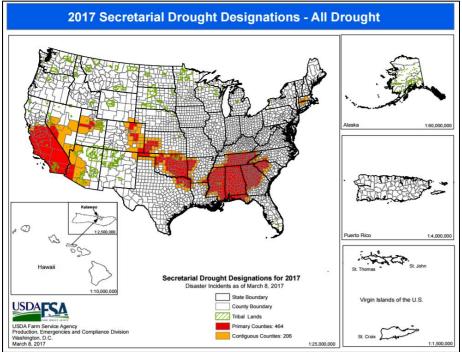
Changes in drought conditions over the last 12 months

Current National Drought Summary, April 4, 2017

Author: Anthony Artusa, NOAA/NWS/NCEP/CPC

"During the past 7-days, an active weather pattern ensued across the contiguous United States. Larger, contiguous areas of heavy precipitation (greater than 2 inches) were observed from Kansas east-northeastward across the Midwest to Lower Michigan, the Lower Mississippi Valley and Gulf Coast area, parts of the Appalachians and adjacent foothills, portions of the Northeast and mid-Atlantic, and the Pacific Northwest. Light precipitation (less than 0.5-inch) was observed across most of California and the Southwest, leeward slopes of the Cascades in Washington and Oregon, the north-central CONUS, eastern Maine, and central and southern Florida. Moderate precipitation (0.5-2.0 inches) was generally reported elsewhere. During the past week, there have been numerous severe weather reports, primarily across the southeastern quadrant of the CONUS, but also overspreading the Midwest and Ohio Valley. After some consideration, it was decided that a few small changes should be made across southern and eastern Georgia and adjacent counties in South Carolina, which have seen increasing dryness and well above-normal temperatures this past week. Once the storm currently influencing this area departs, there will be more time available for a more realistic reassessment of conditions next week."

USDA 2017 Secretarial <u>Drought Designations</u>

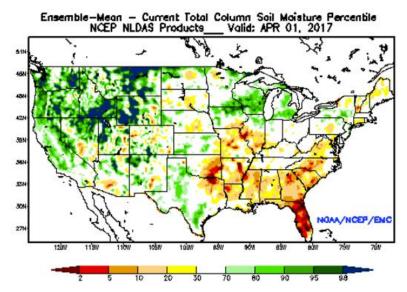


Highlighted Drought Resources

- Drought Impact Reporter
- Quarterly Regional Climate Impacts and Outlook
- U.S. Drought Portal Indicators and Monitoring
- U.S. Population in Drought, Weekly Comparison
- USDA Disaster and Drought Information

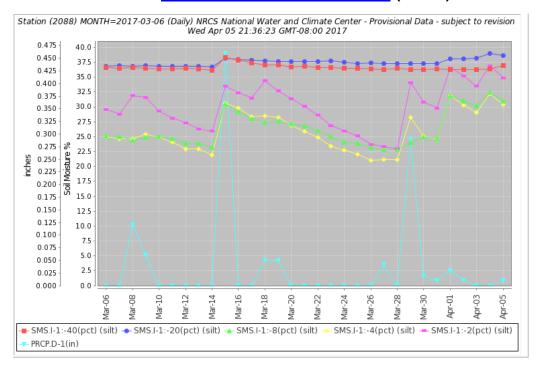
Other Climatic and Water Supply Indicators

Soil Moisture



Modeled soil moisture percentiles as of April 1, 2017.

Soil Moisture Data: NRCS Soil Climate Analysis Network (SCAN)



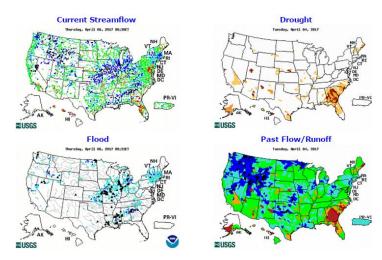
Soil moisture (at 2-, 4-, 8-, 20-, and 40-inch depths) and precipitation for the last 30 days at the <u>Shenandoah SCAN site 2088</u> in Virginia. Precipitation at this site increased the soil moisture at all sensor depths on March 15, with nearly half an inch of precipitation recorded. Precipitation over several days also increased the soil moisture at all sensor depths at the end of March. Other smaller events during this period only increased the soil moisture at the 2-, 4-, and 8-inch depth sensors.

Soil Moisture Data Portals

CRN Soil Moisture

<u>Texas A&M University North American Soil Moisture Database</u> University of Washington Experimental Modeled Soil Moisture

Streamflow Source: USGS



<u>Current streamflow maps</u> Click image to enlarge and display legends

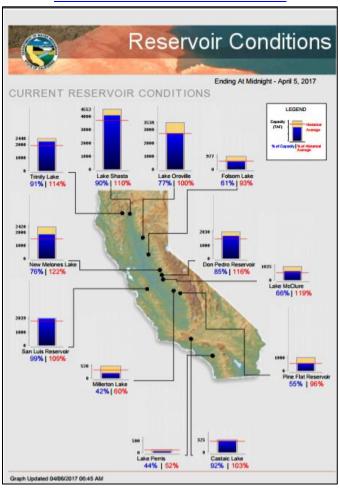
Reservoir Storage

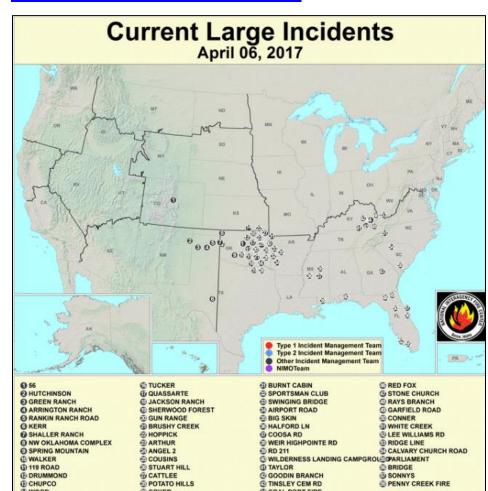
National Water and Climate Center Reservoir Data

U.S. Bureau of Reclamation Hydromet Tea Cup Reservoir Depictions:

Upper Colorado
Pacific Northwest/Snake/Columbia
Sevier River Water, Utah
Upper Missouri, Kansas, Oklahoma, Texas

California Current Reservoir Conditions





Wildfires: USDA Forest Service Active Fire Mapping

Short- and Long-Range Outlooks

Agricultural Weather Highlights

WOOD

Author: Eric Luebehusen, Agricultural Meteorologist, USDA/OCE/WAOB

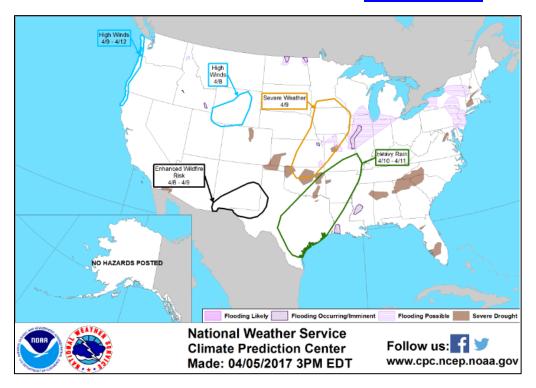
COKER :

National Outlook, April 6, 2017: "A storm centered this morning over the lower Great Lakes will continue to move northeastward, producing rain and wet snow across the northeastern quarter of the nation. Locally heavy showers and thunderstorms — some severe — are likely farther east in the warm, humid, unstable air across the Mid-Atlantic States. In the storm's wake, dry, increasingly warm weather will spread eastward from the Great Plains, reaching the eastern half of the nation by the weekend. Out west, renewed Pacific storminess will generate heavy rain and mountain snow, with 5-day precipitation totals in the Sierra Nevada approaching 6 inches (liquid equivalent), although the Southwest will remain dry. The NWS 6- to 10-day outlook for April 11 – 15 calls for warmer-than normal weather across most of the nation, with pockets of below-normal temperatures confined to Texas' Big Bend Region and the Pacific Northwest. Meanwhile, drier-than-normal conditions are expected from the central Rockies eastward through the Corn Belt and Northeast, with wetter-than-normal weather forecasted for the western Gulf Coast States and from the central and northern Pacific Coast into the upper Midwest."

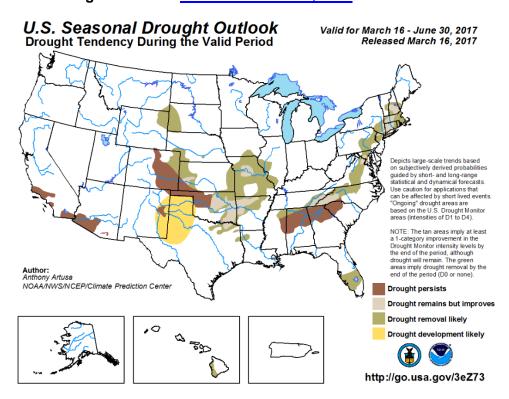
COAL PORT FIRE

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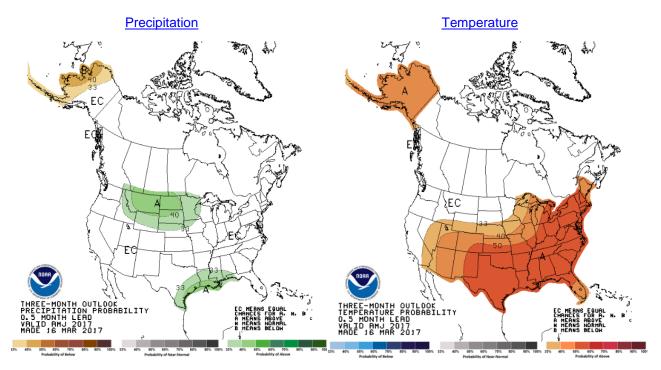
NWS Climate Prediction Center Weather Hazard Outlook: April 8 – 12, 2017



NWS Seasonal Drought Outlook: March 16 - June 30, 2017



NWS Climate Prediction Center 3-Month Outlook



April-May-June (AMJ) 2017 precipitation outlook summary

April-May-June (AMJ) 2017 temperature outlook summary

More Information

The NRCS <u>National Water and Climate Center</u> publishes this weekly report. We welcome your feedback. If you have questions or comments, please <u>contact us</u>.